

CLAIMS

What is claimed is:

1. A bolt-keeper toilet flange comprising:

a toilet-fastener plate having at least one bolt-head bracket articulated to hold a toilet-bolt head;

the bolt-head bracket having a bolt-shank opening on a bolt-head side of the toilet-fastener plate for positioning the toilet-bolt head in the bolt-head bracket with a toilet-bolt shank held uprightly from the toilet-fastener plate in a predetermined place for attachment of a toilet bowl to the toilet bolt with a toilet-bolt nut screwed onto the toilet-bolt shank; and

floor-bolt apertures which extend through the toilet-fastener plate on arcuately opposite sides of the bolt-head bracket for receiving floor-bolt shanks of floor bolts inserted downwardly through the floor-bolt apertures and for retaining floor-bolt heads of the floor bolts proximate a top of the toilet-fastener plate for bolting the toilet-fastener plate to a floor predeterminedly about a toilet-drain aperture in the floor.

2. The bolt-keeper toilet flange of claim 1 wherein:

the toilet-fastener plate includes an arcuate plate having a predetermined arcuate length.

3. The bolt-keeper toilet flange of claim 2 wherein:

the arcuate plate has an arcuate length of predeterminedly proximate two inches, a width of predeterminedly proximate three-fourths of an inch and a thickness of predeterminedly proximate one-sixteenth of an inch.

1 **4.** The bolt-keeper toilet flange of claim 1 wherein:
2 the bolt-head bracket includes a bracket entry that is articulated to
3 receive the toilet-bolt head and the toilet-bolt shank radially from a predetermined
4 entry edge of the fastener plate; and
5 the bolt-head bracket includes an end wall opposite the bracket entry to
6 prevent passage of the toilet-bolt head through the bolt-head bracket.

1 **5.** The bolt-keeper toilet flange of claim 4 wherein:
2 the entry edge of the fastener plate is an arcuately outside edge of the
3 fastener plate.

1 **6.** The bolt-keeper toilet flange of claim 4 wherein:
2 the entry edge of the fastener plate is an arcuately inside edge of the
3 fastener plate.

1 **7.** The bolt-keeper toilet flange of claim 1 wherein:
2 the floor-bolt apertures are arcuate and have aperture lengths that are
3 equal to a predetermined plurality of diameter lengths of the floor bolts.

1 **8.** The bolt-keeper toilet flange of claim 1 wherein:
2 the toilet-fastener plate includes a connector plate with an arcuate
3 extension of predeterminedly proximate 90 degrees, a width of predeterminedly
4 proximate three-fourths of an inch and a thickness predetermined for structure of the
5 bolt-head bracket.

1 **9.** The bolt-keeper toilet flange of claim 1 wherein:
2 the toilet-fastener plate includes a connector plate with an arcuate
3 extension of predetermined proximate 90 degrees, a width of predetermined
4 proximate one-and-one-half inches and a thickness predetermined for structure of the
5 bolt-head bracket.

1 **10.** The bolt-keeper toilet flange of claim 1 wherein:
2 the floor-bolt apertures include a predetermined plurality of circular
3 orifices at a predetermined arcuate radius.

1 **11.** The bolt-keeper toilet flange of claim 1 wherein:
2 the toilet-fastener plate includes a base circumferential plate having a
3 plate diameter predeterminedly in excess of a diameter of a predetermined toilet-
4 drain aperture;
5 the bolt-head bracket including a first bolt-head bracket that is
6 oppositely disposed diametrically from a second bolt-head bracket; and
7 the floor-bolt apertures include two series of predetermined pluralities
8 of the floor-bolt apertures that are oppositely disposed circumferentially at
9 predetermined radii from an axis of the base circumferential plate.

1 **12.** The bolt-keeper toilet flange of claim 11 wherein:
2 the base circumferential plate includes a width of predeterminedly
3 proximate one-and-one-half inches and a thickness predetermined for containing an
4 integral bolt-head bracket and for providing rigidity and duration of materials of
5 construction of the base circumferential plate.

1 **13.** The bolt-keeper toilet flange of claim 11 wherein:
2 the base circumferential plate includes a width of predeterminedly
3 proximate one inch and a thickness predetermined for containing the integral bolt-
4 head bracket and for providing rigidity and duration of materials of construction of
5 the base circumferential plate.

1 **14.** The bolt-keeper toilet flange of claim 1 wherein:
2 the toilet-fastener plate includes a supplemental circumferential plate
3 having a plate diameter predeterminedly in excess of a diameter of the
4 predetermined toilet-drain aperture;
5 the bolt-head bracket including a first bolt-head bracket that is
6 oppositely disposed diametrically from a second bolt-head bracket; and
7 the floor-bolt apertures include four series of predetermined pluralities
8 of the floor-bolt apertures that are oppositely disposed orthogonally at predetermined
9 radii from an axis of the supplemental circumferential plate.

1 **15.** The bolt-keeper toilet flange of claim 14 wherein:
2 the supplemental circumferential plate includes a width of
3 predeterminedly proximate one-and-one-half inches and a thickness predetermined
4 for supporting supplemental bolt-head bracket and for providing rigidity and
5 duration of materials of construction of the supplemental circumferential plate.

1 **16.** The bolt-keeper toilet flange of claim **14** wherein:
2 the supplemental circumferential plate includes a width of
3 predeterminedly proximate one inch and a thickness predetermined for supporting
4 the supplemental bolt-head bracket and for providing rigidity and duration of
5 materials of construction of the supplemental circumferential plate.

1 **17.** The bolt-keeper toilet flange of claim **1** wherein
2 the bolt-head bracket includes the integral bolt-head bracket; and
3 the integral bolt-head bracket including walls that are integral with
4 material of construction of the toilet-fastener plate.

1 **18.** The bolt-keeper toilet flange of claim **1** wherein
2 the bolt-head bracket includes the supplemental bolt-head bracket; and
3 the supplemental bolt-head bracket includes walls that are supplemental
4 to and superimposed onto material of construction of the toilet-fastener plate.

1 **19.** A bolt-keeper toilet flange comprising:
2 an arcuate plate having at least one bolt-head bracket articulated to hold
3 a toilet-bolt head;
4 the bolt-head bracket having a bolt-shank opening on the bolt-head side
5 of the toilet-fastener plate for positioning the toilet-bolt head in the bolt-head bracket
6 with a toilet-bolt shank held uprightly from the toilet-fastener plate in a
7 predetermined place for attachment of a toilet bowl to the toilet bolt with a toilet-bolt
8 nut screwed onto the toilet-bolt shank;

9 *Q2* floor-bolt apertures which extend through the toilet-fastener plate on
10 arcuately opposite sides of the bolt-head bracket for receiving floor-bolt shanks of
11 floor bolts inserted downwardly through the floor-bolt apertures and for retaining
12 floor-bolt heads of the floor bolts proximate a top of the toilet-fastener plate for
13 bolting the toilet-fastener plate to a floor predeterminedly about a toilet-drain
14 aperture in the floor;

15 the arcuate plate has an arcuate length of predeterminedly proximate
16 two inches, a width of predeterminedly proximate three-fourths of an inch and a
17 thickness predetermined for support of the bolt-head bracket;

18 the bolt-head bracket including a bracket entry that is articulated to
19 receive the toilet-bolt head and the toilet-bolt shank radially from a predetermined
20 entry edge of the fastener plate; and

21 the bolt-head bracket includes an end wall opposite the bracket entry to
22 prevent passage of the toilet-bolt head through the bolt-head bracket.

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20. A bolt-keeper toilet flange comprising:

2 a base circumferential plate having a plate diameter predeterminedly in
3 excess of a diameter of the predetermined toilet-drain aperture;

4 a first bolt-head bracket that is oppositely disposed diametrically from
5 a second bolt-head bracket on the base circumferential plate;

6 two series of predetermined pluralities of the floor-bolt apertures that
7 are oppositely disposed circumferentially at predetermined radii from an axis of the
8 base circumferential plate;

9 *A2* the base circumferential plate including a width predetermined for
10 containing the first bolt-head bracket and second toilet-bowl bracket at
11 predetermined radial distances from an axis of the base circumferential plate and for
12 containing the floor-bolt apertures at a predetermined floor-bolt distance from the
13 axis of the circumferential plate; and
14 the base circumferential plate includes a thickness predetermined for
15 containing the integral bolt-head bracket and for providing rigidity and duration of
16 materials of construction of the base circumferential plate.

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